

P  
Astron  
C

STORAGE

---

TORONTO

GENERAL METEOROLOGICAL REGISTER

FOR THE YEAR 1900.

---

STORAGE

# REMARKS ON THE METEOROLOGICAL RESULTS AT TORONTO FOR THE YEAR 1900

## TEMPERATURE.

The mean temperature of the year 1900 was  $46^{\circ}89$ , being  $2^{\circ}56$  warmer than the average of 60 years and  $1^{\circ}06$  warmer than 1899.

The mean temperature of the several months was in ten instances above and in two below the average for the respective months, the average excess to the average defect being in the ratio of  $3^{\circ}78$  to  $3^{\circ}56$ . On each of 239 days the mean temperature was above the normal of that particular day and below on 126 days. The mean temperature of each month, with the difference from the normal, was : January,  $26^{\circ}22+3^{\circ}74$ ; February,  $20^{\circ}64-1^{\circ}88$ ; March,  $23^{\circ}59-5^{\circ}23$ ; April,  $45^{\circ}18+4^{\circ}00$ ; May,  $54^{\circ}86+2^{\circ}49$ ; June,  $65^{\circ}16+2^{\circ}65$ ; July,  $68^{\circ}47+0^{\circ}69$ ; August,  $71^{\circ}57+5^{\circ}22$ ; September,  $63^{\circ}73+5^{\circ}04$ ; October,  $55^{\circ}67+9^{\circ}12$ ; November,  $38^{\circ}29+2^{\circ}03$ ; December,  $29^{\circ}31+2^{\circ}87$ . Dividing the year into the ordinary seasons we have for Winter,  $23^{\circ}48$ ; Spring,  $55^{\circ}07$ ; Summer,  $67^{\circ}92$ ; Autumn,  $41^{\circ}09$ . The thermic anomalies differ from the normal temperature proper to the latitude; Winter,  $-12^{\circ}38$ ; Spring,  $-2^{\circ}57$ ; Summer,  $+1^{\circ}69$ ; Autumn,  $-3^{\circ}24$ . In four months during the year the observed temperature exceeded the normal value for the latitude, viz. : June,  $0^{\circ}56$ ; August,  $3^{\circ}07$ ; September,  $2^{\circ}23$ ; October,  $1^{\circ}87$ . The mean daily range for the year was  $16^{\circ}70$ , the greatest monthly average occurring in July ( $21^{\circ}46$ ) and the least in November ( $10^{\circ}76$ ). The greatest daily range ( $37^{\circ}6$ ) occurred on the 2nd May, and the least ( $3^{\circ}7$ ) on the 14th January. The warmest month relatively was October, estimated by its excess ( $9^{\circ}12$ ) above the normal, August the warmest absolutely ( $71^{\circ}57$ ). The coldest absolutely was February ( $20^{\circ}64$ ). March was the coldest relatively, its mean being  $5^{\circ}23$  below the normal.

The climatic difference was  $50^{\circ}93$ , the warmest day was the 8th of August, mean temperature,  $84^{\circ}07$ , and the coldest the 26th February— $4^{\circ}15$ ; but the warmest day relatively was the 8th February, it being  $21^{\circ}3$  above its proper normal, and the coldest the 26th February, which was  $28^{\circ}2$  below the normal. The average temperature of the warmest and coldest days from former years was  $78^{\circ}06$  and  $2^{\circ}20$  below zero. The highest temperature of the year ( $98^{\circ}0$ ) occurred on the 6th August, and the lowest ( $9^{\circ}6$  below zero) on the 26th of February. The annual range from these extremes was  $107^{\circ}6$ , being  $3^{\circ}5$  more than 1899 and  $4^{\circ}4$  more than the average annual range. There were 45 instances in which the temperature of the hour of observation was  $20^{\circ}$  above the normal and 39 when a defect of equal amount occurred. The most striking deviations from the daily normal curve of temperature have been as follows :

## IN EXCESS.

			°				°
January	5, Mean Deviation	.....	14.2	September	6, Mean Deviation	.....	16.5
do	7	do	17.9	October	2	do	12.8
do	14	do	12.4	do	3	do	13.7
do	15	do	12.4	do	4	do	14.9
do	16	do	12.5	do	5	do	18.3
do	18	do	14.3	do	6	do	19.7
do	19	do	18.3	do	7	do	16.2
do	20	do	13.0	do	15	do	12.6
do	22	do	16.5	do	22	do	13.0
February	7	do	12.0	do	23	do	19.6
do	8	do	21.3	do	24	do	15.7
do	12	do	15.8	do	25	do	12.5
do	18	do	14.1	do	26	do	17.1
April	23	do	13.5	do	27	do	16.9
May	13	do	12.1	do	28	do	14.4
do	14	do	29.1	do	29	do	15.4
do	15	do	17.1	do	31	do	14.2
August	6	do	14.6	November	1	do	13.9
do	8	do	15.7	do	4	do	12.6
do	10	do	14.7	do	18	do	12.4
do	11	do	13.4	do	21	do	13.5
do	25	do	13.8	do	21	do	13.2
do	26	do	13.1	December	19	do	14.6
September	2	do	13.8	do	22	do	16.5
do	6	do	12.3	do	23	do	17.8
do	14	do	14.8	do	24	do	12.4

## IN DEFECT.

o				e			
January	26	Mean Deviation	.....15.5	March	14	Mean Deviation	.....20.6
do	29	do	.....13.2	do	15	do	.....18.9
do	31	do	.....16.0	do	16	do	.....16.6
February	1	do	.....18.2	do	17	do	.....19.7
do	16	do	.....12.6	November	16	do	.....12.3
do	25	do	.....20.8	December	14	do	.....0.1
do	26	do	.....28.2	do	15	do	.....16.0
do	27	do	.....17.0	do	16	do	.....13.6
March	5	do	.....15.8				
do	11	do	.....19.3				
do	12	do	.....14.9				

## BAROMETRIC PRESSURE.

The mean height of the Barometer was 29.621 inches, being 0.001 inches above the average. The month which showed the greatest deviation from the normal was October, 0.109 in excess; September showing the least, 0.006. Average deviation without reference to sign was small, being only 0.033. The highest reading was 30.224 at 2 p.m. of February 27th, and the lowest 28.802 at 4 p.m. of February 22nd, giving a range of pressure of 1.422 inches.

The number of days of large abnormal variations in which the average pressure differed by two-tenths and upwards from the normal was 111 the greatest number (15) occurring in March and the least (3) in May, July and August.

## HUMIDITY.

The mean humidity of the year was 76, being equal to the average, the greatest monthly humidity was 83, in October, and the least, 66 in May. There were 14 cases of complete saturation at the hour of observation; 4 in January, 4 in April, 1 in May, 1 in July, 2 in October and 2 in December. The least humidity of the year at the hour of observation was 22 on the 5th of May, at 4 p.m.

## CLOUDS.

The extent of the sky clouded was on the average of the year six-tenths of the whole. June was the clearest month and December the most cloudy. During the year there were 51 days completely clouded, being 13 less than the average (1853-99), the greatest number (11) occurring in December, none being registered in the months of May and July.

## WIND.

The resultant direction of the wind was S. 88° W., showing 11° less southing than in 1899, and 31° more southing than in the seventeen years to 1890. The mean velocity of the wind without reference to direction was 10.67 miles. The most windy month was February, with an average of 14.29 miles per hour, and the least windy was September, with an average of 6.78 miles. The windiest day was March 6th, average velocity 29.71 miles per hour, and the day of least velocity was January 15th, average velocity 0.13 per hour. The highest velocity in one hour was 45.0 miles, 4 to 5 a.m. of the 12th September.

## RAIN AND SNOW.

The total depth of rain that fell during the year was 22.130 inches, being 5.016 inches less than the average, and 3.665 less than the rainfall of 1899. The depth of snow, 74.6 inches, was 7.2 inches more than the average, and 42.8 inches more than the snowfall of 1899. November was the most rainy month as to quantity (3.025), and July and November with reference to the number of rainy days. January was the least rainy month, only 0.470 inches having fallen.

The day of greatest rainfall was the 6th of March, when 1.440 inches fell. There were only two other days during the year on which over one inch fell.

The heaviest fall of snow in one day was 10.0 inches on the 28th of February. Rain fell on 99 days, being 5 less than the average number, and 6 less than in

1899. Snow fell on 42 days, being 24 less than the average and 2 more than in 1899. There were 187 days on which neither rain or snow fell; in 1899 the number was 185. The rain occupied 442 hours, and the snow 299 hours in its fall, giving a total of 668 hours, or 29 days and 21 hours when rain or snow was actually falling.

#### THUNDER-STORMS.

Of the 24 thunder-storms occurring during the year, the first was on the 18th of April, and the latest on November 21st, 1 in April, 3 in May, 2 in June, 9 in July, 8 in August, 8 in September, 2 in October, and 1 in November. The most severe storms were on the 11th and 29th July, 9th August, 6th and 21st September. Lightning alone the 4th July and 26th August.

#### AURORA.

Auroral displays were less numerous than the previous year. Of the three observed, 1 of the 3rd class and 2 of the 4th class. There were 224 nights favourable for observation. The most brilliant display occurred on the 4th May.

#### SUNSHINE.

The total duration of bright sunshine during the year was 2305.5 hours; number of hours the sun was above the horizon, 4463.3; ratio of registered to possible, 0.52.

## GENERAL METEOROLOGICAL

## MAGNETICAL OBSERVATORY,

Latitude 43° 39' 4 N. Longitude 5h 17m 34.65 West Elevation

	JAN.	FEB.	MAR.	APRIL.	MAY.	JUNE.	JULY.
Average temperature.....	25° 22	20° 64	23° 59	45° 18	54° 86	65° 16	68° 47
Difference from average (60 years).....	+ 3.74	- 1.88	- 5.23	+ 4.00	+ 2.49	+ 2.65	+ 0.69
Thermic Anomaly (Lat. 43° 40').....	- 6.58	- 14.06	- 16.51	- 5.02	- 3.24	+ 0.56	- 0.23
Highest temperature.....	46° 0	43° 0	43° 8	70° 7	87° 5	89° 4	94° 4
Lowest temperature.....	0° 0	- 9° 6	- 3° 0	21° 3	30° 5	44° 4	48° 1
Monthly and annual ranges.....	46° 0	57° 6	46° 8	49° 4	57° 0	45° 0	46° 3
Average maximum temperature.....	32° 98	27° 16	31° 20	53° 11	65° 62	75° 54	79° 91
Average minimum temperature.....	18° 10	12° 72	15° 44	37° 23	44° 65	54° 81	58° 45
Average daily range.....	14° 88	14° 44	15° 76	15° 88	20° 97	20° 73	21° 46
Greatest daily range.....	26° 2	26° 0	29° 4	28° 4	37° 6	35° 4	35° 4
Average height of barometer at 32° Fahr.	29.6041	29.5698	29.6231	29.6484	29.5693	29.5649	29.5607
Difference from average (59 years).....	- 0.0046	- 0.0686	+ 0.0145	+ 0.0468	- 0.0068	- 0.0082	- 0.0271
Highest barometer.....	30° 083	30° 224	30° 192	30° 004	29° 910	29° 860	29° 834
Lowest barometer.....	28° 992	28° 802	28° 937	29° 289	29° 196	29° 211	29° 094
Monthly and annual ranges.....	1° 091	1° 422	1° 255	0° 715	0° 714	0° 649	0° 740
Average humidity of the air.....	82	80	76	67	66	71	72
Difference from average.....	- 1	- 1	- 2	- 3	- 4	- 2	0
Average elasticity of aqueous vapour.....	0.126	0.103	0.103	0.206	0.28	0.435	0.496
Average temperature of dew point.....	23° 5	19° 0	19° 0	35° 3	44° 9	55° 1	58° 8
Average of cloudiness.....	0.72	0.59	0.51	0.52	0.57	0.40	0.48
Difference from average (16 years).....	- 0.02	- 0.10	- 0.12	- 0.06	- 0.00	- 0.12	- 0.02
Resultant direction of wind.....	S 60° W	West	N 81° W	N 72° W	N 31° W	S 85° W	S 78° W
Resultant velocity of wind.....	7.25	4.69	5.89	3.28	0.98	2.26	3.71
Average velocity (miles per hour).....	11.39	14.29	13.04	9.98	12.35	9.62	7.61
Highest velocity in month and year.....	43° 0	41° 0	41° 0	31° 0	36° 0	27° 0	26° 0
Total amount of rain in inches.....	0.470	2.140	1.620	1.830	0.995	2.425	2.730
Difference from average (60 years).....	- 0.742	+ 1.242	+ 0.153	- 0.304	- 2.038	- 0.373	- 0.191
Number of days of rain.....	8	7	3	11	6	9	12
Total amount of snow in inches.....	14.7	30.7	18.3	*	*	.....	.....
Difference from average (60 years).....	- 2.30	+ 13.71	+ 6.33	- 2.39	- 0.12	.....	.....
Number of days of snow.....	12	8	9	.....	.....	.....	.....
Number of fair days.....	10	13	15	16	19	18	17
Number of days completely clouded.....	9	9	4	3	0	1	0
Number of auroras observed.....	1	0	1	0	1	0	0
Possible to see aurora (No. of nights).....	11	17	21	18	16	23	22
Number of thunder storms.....	0	0	0	1	3	2	9
Number of fogs.....	5	3	0	4	0	1	0
Number of hours of bright sunshine.....	95.8	107.8	175.9	221.7	254.9	327.0	287.5
Number of hours of possible sunshine ..	285.7	291.4	369.9	403.5	461.1	465.7	470.9



## REGISTER FOR THE YEAR 1900.

TORONTO, ONTARIO.

above Lake Ontario, 103 feet. Elevation above the Sea, 350 feet.

AUG.	SEPT.	OCT.	NOV.	DEC.	1900.	1899.	1898.	1897.	1896.	1895.	1894.
71° 57' + 5° 22' + 3° 07'	63° 73' + 5° 04' + 2° 23'	55° 67' + 9° 12' + 1° 87'	38° 29' + 2° 03' + 4° 91'	29° 31' + 2° 87' + 6° 63'	46° 89' + 2° 56' + 4° 13'	45° 83' + 1° 50' + 5° 19'	47° 15' + 2° 82' + 3° 87'	45° 93' + 1° 60' + 5° 03'	45° 36' + 1° 03' + 5° 66'	44° 28' + 0° 05' + 6° 74'	46° 75' + 2° 42' + 4° 27'
98° 0' 51° 3' 46° 7' 81° 30' 63° 46' 17° 84' 32° 6'	91° 7' 44° 0' 47° 7' 72° 80' 54° 96' 17° 84' 28° 2'	83° 0' 25° 9' 57° 1' 64° 40' 47° 16' 17° 24' 32° 0'	64° 8' 14° 1' 50° 7' 43° 91' 33° 15' 10° 76' 22° 3'	48° 4' + 1° 5' 40° 9' 35° 54' 22° 18' 12° 56' 23° 9'	98° 0' - 9° 6' 107° 6' ..... ..... 16° 70' 37° 6'	92° 1' - 12° 0' 104° 1' ..... ..... 17° 51' 35° 0'	97° 1' - 15° 0' 112° 1' ..... ..... 17° 48' 34° 4'	93° 3' - 7° 2' 100° 5' ..... ..... 16° 21' 36° 0'	91° 3' - 17° 9' 100° 2' ..... ..... 17° 58' 38° 9'	93° 4' - 21° 2' 114° 6' ..... ..... 17° 26' 36° 9'	90° 7' - 9° 9' 111° 1' ..... ..... 16° 27' 34° 3'
29° 6469 + 0305 29° 909 29° 442 0° 407	29° 6723 - 0060 29° 935 29° 041 0° 894	29° 7562 + 1031 30° 127 29° 426 0° 701	29° 6039 - 0220 30° 196 28° 900 1° 206	29° 6360 + 0128 30° 216 28° 802 1° 037	29° 6213 + 0014 30° 224 28° 802 1° 422	29° 6365 + 0169 30° 403 28° 657 1° 746	29° 6216 + 0017 30° 218 28° 779 1° 486	29° 6319 + 0120 30° 353 28° 779 1° 574	29° 6382 + 0183 30° 422 28° 734 1° 688	29° 6171 - 0028 30° 240 28° 746 1° 484	29° 6246 + 0047 30° 516 29° 035 1° 481
76 + 2	78 + 1	83 + 5	81 + 1	79 - 3	76 0	76 0	76 0	76 0	75 - 1	75 - 1	76 0
0° 586 63° 5	0° 470 57° 2	0° 386 51° 9	0° 196 34° 0	0° 135 25° 0	0° 295 44° 6	0° 279 43° 1	0° 289 44° 1	0° 274 42° 7	0° 254 38° 9	0° 253 41° 3	0° 277 42° 9
0° 45 - 05	0° 49 - 01	0° 55 - 07	0° 74 - 01	0° 78 + 02	0° 57 - 04	0° 56 - 05	0° 58 - 03	0° 61 00	0° 60 - 01	0° 57 - 04	0° 60 - 01
S 51° E 0° 47 7° 76 22° 0	N 80° W 1° 30 6° 78 44° 0	N 23° W 1° 60 9° 06 33° 0	N 67° W 3° 92 13° 17 44° 0	S 72° W 7° 31 13° 11 41° 0	S 85° W 3° 09 10° 67 44° 0	S 77° W 2° 66 10° 14 50° 0	N 65° W 1° 78 10° 12 55° 0	N 89° W 2° 42 12° 33 51° 0	N 88° W 0° 75 8° 44 50° 0	S 78° W 1° 36 5° 60 60° 0	N 70° W 1° 10 5° 67 58° 0
2° 745 - 0° 011 11	1° 425 - 1° 855 7	2° 115 - 0° 316 9	3° 025 + 0° 392 12	0° 610 - 0° 973 4	22° 130 - 5° 016 99	25° 795 - 1° 351 105	23° 800 - 3° 346 98	27° 737 + 0° 591 110	21° 770 - 5° 376 104	22° 532 - 4° 614 101	25° 785 - 1° 361 114
..... ..... .....	..... ..... .....	..... ..... .....	8° 7 + 4° 02 4	2° 2 - 11° 39 9	74° 6 + 7° 20 42	31° 8 - 45° 60 40	71° 3 + 3° 90 53	47° 4 - 20° 00 43	73° 3 + 5° 90 43	54° 8 - 12° 60 48	37° 8 - 29° 60 32
18 2	18 1	20 1	10 10	13 11	187 51	185 44	196 56	173 58	174 55	196 48	179 43
0 21	0 26	0 24	0 13	0 12	3 224	10 226	7 210	3 179	18 194	11 195	23 199
8 1	8 2	2 8	1 1	0 4	34 29	29 31	34 26	19 28	25 30	23 33	36 50
278° 8 434° 5	213° 8 376° 3	170° 1 340° 2	97° 9 286° 9	74° 3 274° 3	2305° 5 4463° 3	2148° 2 4463° 3	2128° 9 4463° 3	1987° 6 4463° 3	2146° 7 4474° 4	2159° 7 4463° 3	2017° 7 4463° 3

## TEMPERATURE.

	1900.	Average of 60 years.	EXTREMES.	
	°	°	°	°
Average temperature of the year.....	46.89	44.33	47.15 in 1898	40.77 in 1873
Warmest month.....	August.	July.	July, 1898	Aug., 1860
Average temperature of the warmest month...	71.57	67.71	70.80	64.46
Coldest month.....	February.	January.	Feb., 1875	Feb., 1848
Average temperature of the coldest month.....	20.64	22.48	10.16	26.00
Difference between the temperature of the warmest and coldest months.....	50.93	45.30	.....	.....
Average of deviations of monthly means from their respective averages of 60 years, signs of deviations being disregarded. ....	3.75	2.79	3.58	.....
Month of greatest deviation without regard to sign.....	October.	January.	Feb. 1875.	.....
Corresponding magnitude of deviation.....	9.12	3.81	12.41	.....
Warmest day.....	8 Aug.	.....	July 14, 1868	July 31, 1844
Average temperature of the warmest day.....	84.07	78.06	84.50	72.75
Coldest day.....	26 Feb.	.....	Feb 6, 1855	Dec. 22, '42
Average temperature of the coldest day.....	-4.15	-2.20	-14.33	9.57
Date of the highest temperature.....	6 Aug.	.....	Aug 24, 1854	Aug. 19, 1840
Highest temperature.....	98.0	91.00	99.2	82.4
Date of lowest temperature.....	26 Feb.	.....	Jan. 10, 1859	Jan. 2, 1842
Lowest temperature.....	-9.6	-12.24	-26.5	1.9
Range of the year.....	107.6	103.24	125.24	87.0
			118.2	

## BAROMETER.

	1900.	Average of 59 years.	EXTREMES.	
	in.	in.	in.	in.
Average pressure of the year.....	29.6213	29.6199	{ 29.6679 in 1849	29.5602 in 1864
Month of the highest average pressure.....	October.	September	Jan., 1849	June, 1864
Highest monthly average pressure.....	29.7562	29.6663	29.8046	29.6525
Month of the lowest average pressure.....	July.	June	March, 1859	Nov., 1859
Lowest Monthly average pressure.....	29.5607	29.5731	29.4143	20.5886
Date of the highest pressure in the year.....	27 Feb	.....	Jan. 8, 1856	Mar. 7, 1878
Highest pressure.....	30.224	30.356	30.940	30.189
Date of the lowest pressure in the year.....	22 Feb.	.....	Jan. 2, 1877	June, 2, 1894
Lowest pressure.....	28.802	28.702	28.166	29.035
Range for the year.....	1.422	1.654	{ 2.240 in 1893	1.303 in 1845

## RELATIVE HUMIDITY.

	1900.	Average of 59 years.	EXTREMES.	
Average humidity of the year.....	76	76	82 in 1851	73 in 1858
Month of greatest humidity.....	October.	January.	Jan., 1857	Dec., 1858
Greatest average monthly humidity.....	83	83	89	81
Month of least humidity.....	May.	May.	Feb., 1843	April, 1849
Least average monthly humidity.....	66	70	83	76



## EXTENT OF SKY CLOUDED.

	1900.	Average of 47 years.	EXTREMES.	
Average cloudiness of the year.....	0.57	0.61	0.66 in '99 '77	0.56 in 1899
Most cloudy month.....	December	December	0.89	0.73
Greatest monthly average cloudiness.....	0.78	0.76	0.89	0.73
Least cloudy month.....	June	July	0.50	0.59
Least monthly average of cloudiness.....	0.49	0.50	0.50	0.59

## WIND.

	1900.	Average of 17 years.	EXTREMES.	
Resultant direction.....	S. 88° W.	N. 61° W.		
Resultant velocity in miles.....	3.09	2.51		
Average velocity without regard to direction.....	10.67	9.64	12.33 in 1897	8.32 in 1878
Month of greatest average velocity.....	February	March	April, 1880	Dec., 1875
Greatest monthly average velocity.....	14.29	11.49	17.01	10.42
Month of least average velocity.....	September	July	July, 1878	July, 1881
Least monthly average velocity.....	6.78	7.56	5.93	8.43
Day of greatest average velocity.....	6 March		Nov. 17, 1870	Feb. 10, 1885
Greatest daily average velocity.....	29.71	28.98	41.67	23.79
Day of least average velocity.....	15 January			
Least daily average velocity.....	0.13			
Hour of greatest absolute velocity.....	{ 12 Sept.		Dec. 1, 1895	Jan. 17, 1885
	{ 4-5 a.m.		9 to 10 a.m.	10 to 11 a.m.
Greatest velocity.....	45.0	45.67	64.0	39.0

NOTE.—During the year 1900, the wind has been obtained from the records of the anemograph at Stanley Barracks, and no comparison has been made with the results of former years.

## RAIN.

	1900.	Average of 60 years.	EXTREMES.	
Total depth of rain in inches.....	22.130	27.146	43.555 in 1843	17.574 in 1874
Number of days on which rain fell.....	99	113	145 in 1890	80 in 1841
Month in which the greatest depth of rain fell.....	November	September	Sept., 1843	June, 1887
Greatest depth of rain in one month.....	3.625	3.280	9.760	2.655
Month in which the days of rain were most frequent.....	July Nov.	October	{ Jan., 1869 }	May, 1841
Greatest number of rainy days in one month.....	12	13	23	11
Day on which the greatest amount of rain fell.....	March 6th	.....	July 27, 1897	Sept. 14, 1884
Greatest amount of rain in one day.....	1.410	1.923	3.881	1.000

## MEAN METEOROLOGICAL RESULTS FOR 1900.

## SNOW.

	1900.	Average of 57 years.	EXTREMES.	
Total depth of snow in inches.....	74.6	67.4	122.9 in 1870	34.6 in 1888
Number of days on which snow fell.....	42	66	87 in 1859	33 in 1845
Month in which the greatest depth of snow fell.....	February	January	March, 1870	Jan., 1895
Greatest depth of snow in one month.....	30.7	17.2	62.4	10.5
Month in which the days of snow were most frequent.....	January	January	Dec. 1872	Feb., 1848
Greatest number of days of snow in one month.....	12	15	24	8
Day in which the greatest amount of snow fell.....	28 Febr.	—	{ Feb. 5, 1863 Mar. 27, 1870	{ 4.6 Jan. '88
Greatest fall of snow in one day.....	10.0	8.8	16.0	3.0

## SUNSHINE.

	1900.	Average 1882 to 1899
Total duration of bright sunshine in hours.....	2305.5	2052.4
Ratio to possible amount.....	0.52	0.46
Month of greatest relative amount.....	June	July
Ratio to possible amount.....	0.70	0.60
Month of least relative amount.....	December	December
Ratio to possible amount.....	0.27	0.22
Number of days completely clouded.....	51	62
Day of greatest relative amount.....	July 13,	—
Ratio to possible amount.....	0.92	0.91

## DIFFERENCES OF CERTAIN METEOROLOGICAL ELEMENTS FOR 1900 FROM THE NORMAL VALUES FOR EACH QUARTER AND YEAR.

	Bar.	Tem.	Rain.	Days Rain.	Snow.	Days Snow.	Cloud- ed Sky.
	in.	°	in.		in.		p.c.
Winter.....	-.0328	-1.12	+0.653	+1.64	+17.74	-8.99	-8.00
Spring.....	+.0106	+3.45	-2.715	-7.90	-2.51	-3.94	-6.00
Summer.....	+.0039	+3.65	-2.057	-3.48	—	—	-2.67
Autumn.....	+.0248	+4.67	-0.897	-4.75	-8.03	-10.54	-2.00
Year.....	+.0014	+2.56	-5.016	-14.49	+7.20	-23.47	-4.67

## PERIODICAL OR OCCASIONAL EVENTS, 1900.

January .....	4.	Chickadee and Woodpecker seen.
	11.	Heavy snow storm, making good sleighing.
February .....	14.	Splendid Solar halo and mock suns.
	26.	Coldest day of year, mean temperature $4^{\circ}15'$ below zero.
March .....	5.	Evening Grosbeaks.
	6.	Heaviest rainstorm of year, 1.440 inches.
	20.	Robins, Woodpeckers.
	21.	Last sleighing.
	29.	Ice broken up on Bay.
	31.	First vessel entered harbour.
April .....	1.	Gulls flying north-east, Blue Birds, Ruby Crowned Kinglet, Plover.
	5.	Bronzed Grackles, Song Sparrow.
	10.	Meadow Larks.
	12.	Earth Worms above ground.
	15.	Junco, Hepatica in bloom.
	16.	Crocus in bloom, Butterflies.
	17.	Flickers, Olive Backed Thrush, Phoebe, Soft Maple in bloom, Frogs piping.
	18.	First thunder storm of year. Crowfoot in bloom.
	20.	Heavy hoar frost.
	22.	Towhee, Kingfisher, Bittern, Swallows, Reed Birds. Elm in bloom.
	24.	House Wren. Willow in bloom.
	27.	Ash, Cottonwood, Arbutus and Red Maple in bloom. First Caterpillar out.
	30.	Willow, Elder and Horse Chestnut shewing a few leaves.
May .....	1.	Dandelion in bloom.
	2.	Brown Thresher.
	4.	Thin ice.
	6.	Whip-poor-will.
	7.	Cow Birds common, Blackburnian Warbler, Black Throated Warbler, Red Start, Cat Bird, Veery, Black and White Warbler. Orioles.
	8.	Tree Creepers common, Chimney Swifts.
	10.	Chestnut Sided Warbler, King Birds, White Crowned Sparrow.
	12.	Hoar frost.
	13.	Wild Violet and Marsh Mallow in full bloom, Choke Cherry, Blueberry, Wild Strawberry and Stone Crop in bloom, Pear in bloom.
	14.	Plum in bloom, Japonica in bloom. Night Hawks.
	15.	Apple in bloom. Flowering Currant in bloom.
	19.	Lilacs and Flowering Almond in bloom.
	23.	Horse Chestnut in bloom.
	28.	Hawthorn in bloom.
June .....	11.	Wild Raspberry in bloom.
August .....	8.	Warmest day of year, mean temperature $84^{\circ}10'$ . Heat has been so prostrating that many factories shut down, and the death rate among infants and old people largely increased.
September .....	12.	Heavy gale from North-west.
	29.	Bronzed Grackles very numerous.
October .....	10.	Hoar frost.
	11.	Swallows last seen.
	22.	Bright Meteor 10.4 p. m. from south-east to north-west
November .....	10.	First snow.
	13.	First sleighing.
	15.	Don River frozen.
	21.	Last thunder storm of year.
December .....	15.	Bay frozen over

1000

1000